Message

From: Bankoff - CDPHE, Michael [michael.bankoff@state.co.us]

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To: Johnson, Brian S [brian.s.johnson@bp.com]; Brown, Anthony R (RM) [anthony.brown@bp.com]; Kathy Tegtmeyer

[ktegtmeyer@formationenv.com]; Cohen, Adam [Adam.Cohen@dgslaw.com]; Satterlee, Lucas [Lucas.Satterlee@dgslaw.com]; Lukas Staks [Lukas.Staks@coag.gov]; Pfeifer, Kevin (CONTRACTOR)

[kevin.pfeifer@copperenv.com]; mark.rudolph@state.co.us

CC: Peronard, Paul [Peronard.Paul@epa.gov]
Subject: Beneficial use of soils in Rico - Next steps

Attachments: Application for Solid Waste Beneficial Use Determination (7).PDF

Good afternoon,

A few weeks have passed since we had the initial discussion of the potential for beneficial use of soils in Rico. I appreciate your patience and it has allowed me to get up to speed on some of the issues currently affecting Rico soils and to understand how beneficial use permitting may have a role to play.

As I currently understand it, the site-specific residential and commercial/industrial numbers for lead in soil of 1100ppm and 1700ppm would represent the range of soil lead values that we would likely work with under beneficial use permitting. However, the beneficial use regulations require that the permitted use may not have a negative impact on groundwater. So, TCLP testing for the potential leachability of lead in soil will be needed. Representative TCLP sampling for the particular source areas and soil types proposed for beneficial use will be a necessary part of the application package for a beneficial use determination. The general requirements of what needs to be included in such an application package are shown on page 2 of the attached application form. However, that list is fairly generic so to better define what we would need to evaluate in order to make a beneficial use determination, the following would be required in addition:

- 1. Representative TCLP data for the soils in the 1100-1700ppm lead range.
- 2. Maps showing the area overview, areas of excavation, areas of proposed beneficial uses, other maps as applicable.
- 3. Geotechnical lab data or other evidence to document that the material proposed for beneficial use is suitable for the end use and will meet the relevant engineering or other appropriate specifications.
- 4. Documentation that the proposed beneficial use material does not pose a risk of release during flood events, or flood risk mitigation steps to be taken if the proposed use may pose a risk of release during a flood event.
- 5. Documentation of the seasonally-high groundwater elevation in the area of proposed use. As mentioned on the call a few weeks ago, we generally require a 3 foot buffer distance between seasonally-high groundwater and the lowest point of the impacted fill material. This is likely in addition to a requirement for some type of clean soil cap or other cover material.
- 6. Distances between the area of proposed beneficial use and nearest surface water and wells.
- 7. Normally an environmental covenant would be placed over the property or area receiving the impacted soil but since this is a unique situation, it appears that some kind of ordinance will be taking the place of the covenant. Please include some description or reference to this in the project overview.
- 8. Any other information as needed, such as proposed liners, covers, etc.

I would also request a Materials Management Plan be included as part of the application package as well. There may already be such a plan that can be used that I just have not seen yet in the files, but if not, it should clearly spell out safe work practices to minimize releases and exposures, not only to lead but also for other commonly encountered contaminants during excavation and soil handling. Prior projects generally have included the MMP by reference into an environmental covenant. I am not sure the extent to which that may or may not be possible

under an ordinance, but we'll need to look into that. We do have a generic MMP template available here on our website: https://www.colorado.gov/pacific/cdphe/swguidance

We also discussed how to handle those soils between 400-1100ppm. Some TCLP sampling in this range as well would help rule out the likelihood of lead leachability from this material and, assuming results look good, we could look at any number of uses for material that falls into this category.

My understanding is that material above the 1700ppm level would be sent to the repository.

Hopefully, this all sounds feasible. This is a project with a long history and I am only recently getting acquainted with it, so if I am getting something wrong or if you have other questions or concerns please contact me.

Thank you,

Michael Bankoff Environmental Protection Specialist Materials Management Unit



P 303.692.3438 | F 303.759.5355 4300 Cherry Creek Drive South, Denver, CO 80246 michael.bankoff@state.co.us | https://www.colorado.gov/pacific/cdphe